







OPERATING INSTRUCTIONS

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**A-965**  
***7-CH Power Amplifier***

# Introduction

## READ THIS BEFORE OPERATING YOUR UNIT

 <div data-bbox="285 323 492 401"> <b>CAUTION</b>  RISK OF ELECTRIC SHOCK  DO NOT OPEN </div> 	 <p>This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p>
<b>CAUTION</b> : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	 <p>This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>

**WARNING** : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,  
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

### Caution regarding placement

To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) equal to, or greater than, shown below.

Left and right panels : 10 cm  
Rear panel : 10 cm  
Top panel : 30 cm

***Do not block ventilation openings or stack other equipment on the top.***

## FOR YOUR SAFETY

<b>EUROPE AUSTRALIA</b>	<b>220 V - 240 V</b>	<p>Units shipped to Australia are designed for operation on 240 V AC only.</p> <p>To ensure safe operation, the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth.</p> <p>Improper extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.</p> <p><b>PAN-EUROPEAN UNIFIED VOLTAGE</b> All units are suitable for use on supplies 230~240 V AC.</p>
<ul style="list-style-type: none"> <li>• Avoid high temperatures. Allow for sufficient heat dispersion when installed on a rack.</li> <li>• Keep the set free from moisture, water, and dust.</li> <li>• Do not let foreign objects in the set.</li> <li>• Handle the power cord carefully. Hold the plug when unplugging the cord.</li> <li>• Unplug the power cord when not using the set for long periods of time.</li> <li>• Do not obstruct the ventilation holes.</li> <li>• Do not let insecticides, benzene, and thinner come in contact with the set.</li> <li>• Never disassemble or modify the set in any way.</li> </ul>		

### CAUTION

- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Please be care the environmental aspects of battery disposal.
- The apparatus shall not be exposed to dripping or splashing for use.
- No objects filled with liquids, such as vases, shall be placed on the apparatus.

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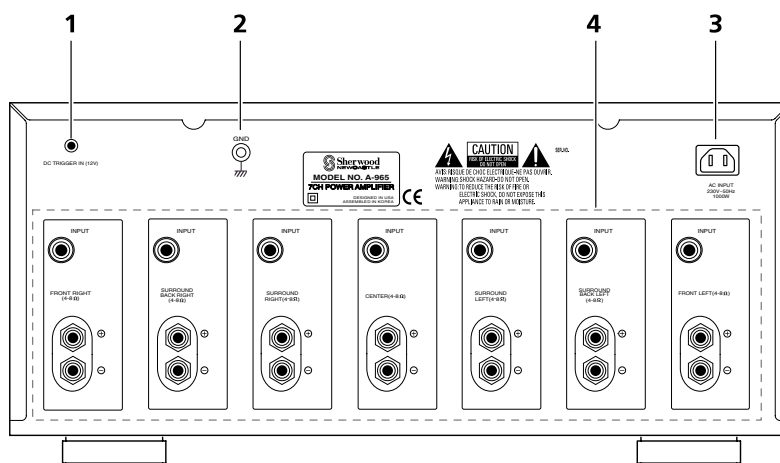
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# System Connections

- Please be certain that this unit is unplugged from the AC outlet before making any connections.
- Be sure to observe the color coding when connecting the pre amplifier and speakers to this unit.
- Make connections firmly and correctly. If not, poor connections can cause loss of sound, noise or damage to the unit.
- For connections between this unit and the Sherwood compatible pre amplifier such as P-965, refer to the system connections in the operating instructions of that.

## Notes:

- Do not place other equipment on top of this unit so that the radiated heat can be properly dispersed.
- When installing in racks, etc., leave more than 30 cm(12") of space at the top.

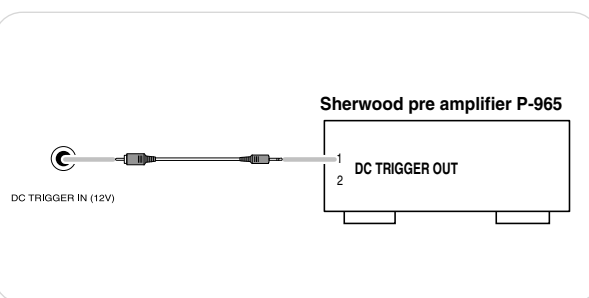


## 1. DC TRIGGER IN

In case that this unit is connected to Sherwood pre amplifier P-965, connect this jack to the “1” jack of DC TRIGGER OUTs of P-965 directly for system power control. (For details, refer to the operating instructions of P-965.)

### Note:

- When making DC TRIGGER connection, you should use the stereo mini cord supplied with this unit, not a mono mini cord.



## 2. GROUND TERMINAL

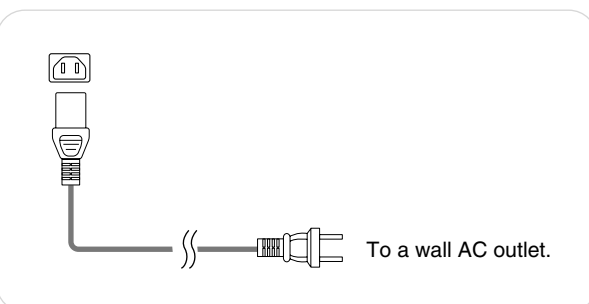
If necessary, connect this terminal to the “GND” of other component.

## 3. AC INLET

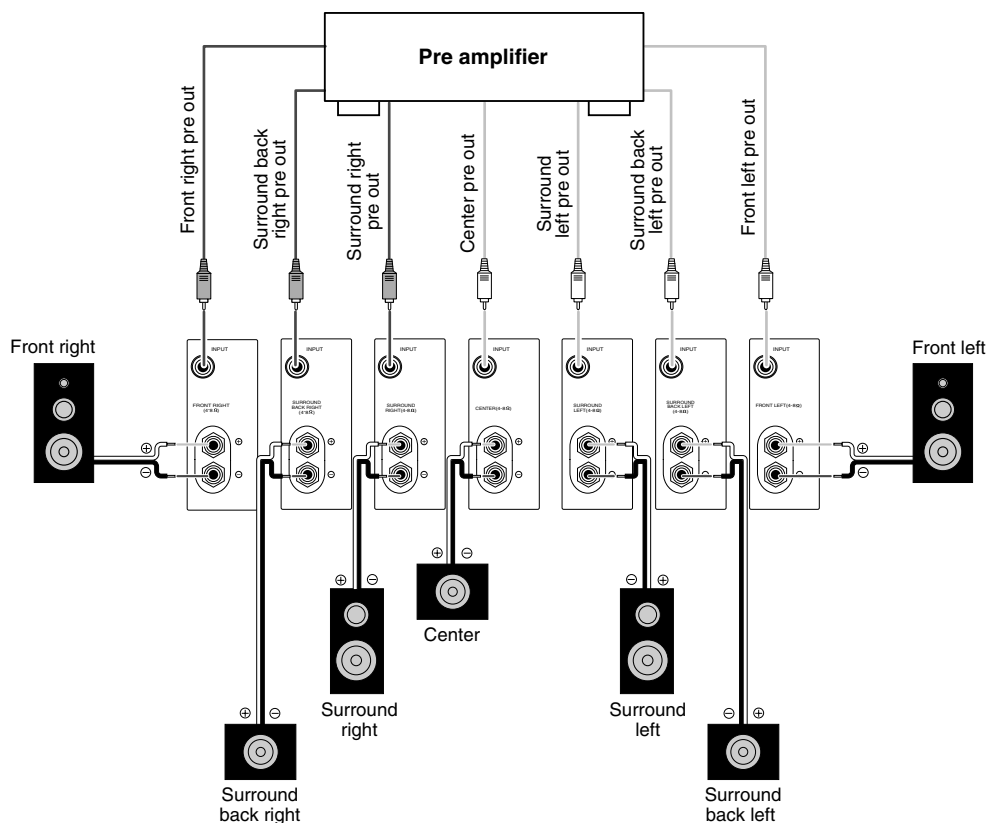
Plug the supplied AC input cord into this AC INLET and then into the wall AC outlet.

### Note:

- Do not use an AC input cord other than the one supplied with this unit. The AC input cord supplied is designed for use with this unit and should not be used with any other device.



## 4. CHANEL INPUTs and SPEAKER TERMINALS



- Be sure to connect speakers firmly and correctly according to the channel (left and right) and the polarity(+ and -). If the connections are faulty, no sound will be heard from the speakers, and if the polarity of the speaker connections is incorrect, the sound will be unnatural and lack bass.
- Only when enjoying either 6.1 or 7.1 channel surround playback, connect either the surround back left speaker only or both of surround back speakers.
- To emphasize the deep bass sounds, connect a powered subwoofer to the pre amplifier such as Sherwood P-965 not to this power amplifier. (For details, refer to the operating instructions of the pre amplifier.)
- For installing the speakers, refer to "VARIOUS CONNECTIONS OF SPEAKER CORDS" on page 6 and "SPEAKER PLACEMENT" on page 7.
- After installing the speakers, first adjust the speaker settings on your pre amplifier according to your environment and speaker layout.(For details, refer to the operating instructions of the pre amplifier.)

### CAUTION

- Be sure to use the speakers with the impedance of 4~8Ω.
- Do not let the bare speaker wires touch each other or any metal part of this unit. This could damage this unit and / or the speakers.

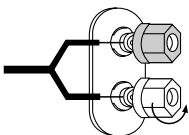
## VARIOUS CONNECTIONS OF SPEAKER CORDS

### General connection using the bare cords

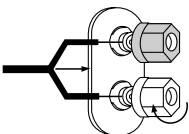
1. Carefully strip about 10 mm (3/8") of insulation and twist the wire tip.



2. Loosen the knob and insert the wire.

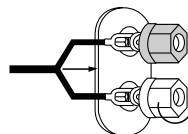


3. Tighten the knob to fix the wire in place.

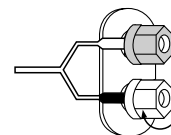


### Connection using the spade plugs

1. Loosen the knob and insert the spade plug.

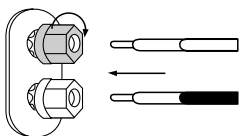


2. Tighten the knob to fix.

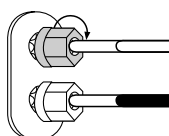


### Connection using the banana plugs

1. Tighten the knob.



2. Insert the plug fully into the hole on the knob.



## SPEAKER PLACEMENT

Ideal speaker placement varies depending on the size of your room and the wall coverings, etc. The typical example of speaker placement and recommendations are as follows :

### ■ Front left and right speakers and center speaker

- Place the front speakers with their front surfaces as flush with TV or monitor screen as possible.
- Place the center speaker between the front left and right speakers and no further from the listening position than the front speakers.
- Place each speaker so that sound is aimed at the location of the listener's ears when at the main listening position.

### ■ Surround left and right speakers

- Place the surround speakers approximately 1 meter(40 inches) above the ear level of a seated listener on the direct left and right of them or slightly behind.

### ■ Surround back left and right speakers

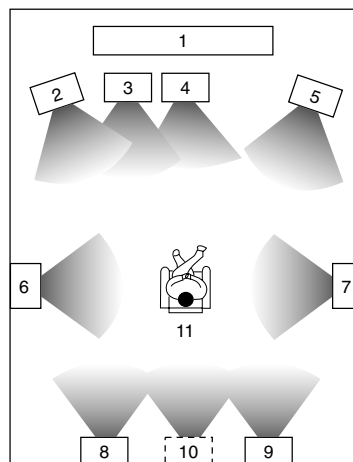
- Place the surround back speakers at the back facing the front at a narrower distance than the front speakers.
- When using a single surround back speaker, place it at the rear center facing the front at a slightly higher position(0 to 10 inches) than the surround speakers.
- We recommend installing the surround back speaker at a slightly downward facing angle. This effectively prevents the surround back channel signals from reflecting off the TV or screen at the front center, resulting in interference and making the sense of movement from the front to the back less sharp.

### ■ Subwoofer

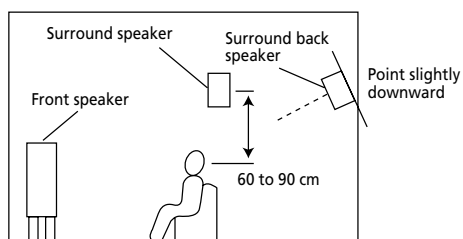
- The subwoofer reproduces powerful deep bass sounds.  
Place a subwoofer anywhere in the front as desired.

### ■ Notes :

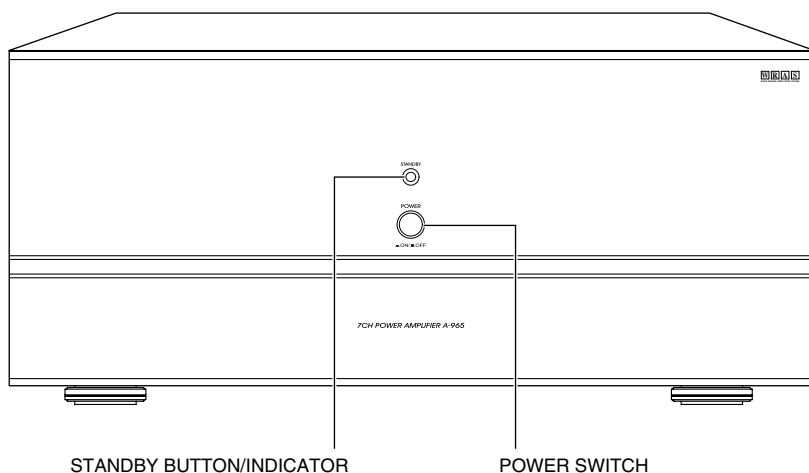
- When using a conventional TV , to avoid interference with the TV picture, use only magnetically shielded front left and right and center speakers.
- To obtain the best surround effects, the speakers except the subwoofer should be full range speakers.



- |                          |                                  |
|--------------------------|----------------------------------|
| 1. TV or screen          | 7. Surround right speaker        |
| 2. Front left speaker    | 8. Surround back left speaker    |
| 3. Subwoofer             | 9. Surround back right speaker   |
| 4. Center speaker        | 10. Surround back center speaker |
| 5. Front right speaker   | 11. Listening position           |
| 6. Surround left speaker |                                  |



## Front Panel Controls



## Operations

1

To enter the standby mode.



- The STANDBY button lights up in amber. This means that the unit is connected to an AC outlet and a small amount of current is retained to support operation readiness.
- To switch the power off, push the POWER switch again. Then the power is cut off and the STANDBY button goes off.

2

In the standby mode, turn the power on.



- The STANDBY button lights up in blue, the unit turns on and enters the operating mode. Sound can be heard from the speakers in a few seconds.

3

In the operating mode, to enter the standby mode.



- The STANDBY button lights up in amber.

### ■ Note on system power control

If the DC TRIGGER connection is made between this unit and Sherwood pre amplifier P-965, this unit will be switched between the standby mode and the operating mode automatically each time P-965 is switched between these modes. (For details, refer to the operating instructions of P-965.)



# Troubleshooting Guide

If a fault occurs, run through the table below before taking your unit for repair.

If the fault persists, attempt to solve it by switching the unit off and on again. If this fails to resolve the situation, consult your dealer. Under no circumstances should you repair the unit yourself as this could invalidate the warranty!

PROBLEM	POSSIBLE CAUSE	REMEDY
No power	<ul style="list-style-type: none"> <li>• The AC input cord is disconnected.</li> <li>• Poor connection at AC wall outlet or the outlet is inactive.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect the cord securely.</li> <li>• Check the outlet using a lamp or another appliance.</li> </ul>
No sound	<ul style="list-style-type: none"> <li>• Speaker cords are disconnected.</li> <li>• Incorrect connections between the components.</li> <li>• Incorrect operation of the pre amplifier.</li> </ul>	<ul style="list-style-type: none"> <li>• Check the speaker connections.</li> <li>• Make connections correctly.</li> <li>• Check the functions of the pre amplifier and operate correctly.</li> </ul>
No sound from one channel	<ul style="list-style-type: none"> <li>• Speaker cords are connected incorrectly or incompletely.</li> <li>• Incorrect connections between the components.</li> <li>• Defective speaker.</li> </ul>	<ul style="list-style-type: none"> <li>• Check the speaker connections and reconnect them.</li> <li>• Make connections correctly.</li> <li>• Check the speaker and repair it or replace by new one.</li> </ul>
Excessive hum at normal volume level	<ul style="list-style-type: none"> <li>• The hum is induced from other components.</li> <li>• Defective connection cords.</li> </ul>	<ul style="list-style-type: none"> <li>• Place the power amplifier away from the pre amplifier and the record player.</li> <li>• Replace by new ones.</li> </ul>
Distorted sound	<ul style="list-style-type: none"> <li>• The power amplifier overdriven.</li> <li>• Too low impedance speakers are connected.</li> </ul>	<ul style="list-style-type: none"> <li>• Decrease the volume on the pre amplifier.</li> <li>• Check the speakers and use the speakers with the impedance of 4~8Ω.</li> </ul>

# Specifications

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## • Amplifier Section

Power output, stereo mode, 8  $\Omega$ , THD 0.02 %, 1 kHz | **2 × 125 W**

4  $\Omega$ , THD 0.02 %, 1 kHz | **2 × 170 W**

7-CH mode(full channel driven), 8  $\Omega$ , THD 0.02 %, 1 kHz | **7 × 100 W**

4  $\Omega$ , THD 0.02 %, 1 kHz | **7 × 150 W**

7-CH mode(only channel driven), 8  $\Omega$ , THD 0.02 %, 1 kHz | **130 W/CH**

4  $\Omega$ , THD 0.02 %, 1 kHz | **200 W/CH**

Total harmonic distortion, 8  $\Omega$ , 125 W, 1 kHz | **0.02 %**

Intermodulation distortion

60 Hz : 7 kHz = 4 : 1 SMPTE, 8  $\Omega$ , 125 W | **0.01 %**

Input sensitivity, 47 k $\Omega$  | **1.0 V**

Signal to noise ratio, IHF "A" weighted

100 W, 8  $\Omega$ , 0 dB | **115 dB**

1 W, 8  $\Omega$ , 0 dB | **100 dB**

Frequency response, 20 Hz~100 kHz | **+0, -1 dB**

Damping factor | **100**

## • General

Power supply | **230 V ~ 50 Hz**

Power consumption | **1000 W**

Dimensions (W × H × D) | **440 × 196 × 450 mm(17-3/8 × 7-3/4 × 17-3/4 inches )**

Weight (Net) | **32 kg (70.6 lbs)**

Note: Design and specifications are subject to change without notice for improvements.

**A-965**  
**7-CH Power Amplifier**